University of Kentucky
Institutional Biosafety Committee (IBC) Meeting

Date: 03JUNE2026
Time: 12:01PM – 12:51PM
Location: Virtual Meeting via Zoom - https://uky.zoom.us/j/88017892778

Minutes

Call to Order

The meeting was called to order by Douglas Harrison at 12:01PM EST.

Attendance

IBC Members Present

Thomas Chambers (Local, Non-Affiliated Member)

Doug Harrison (Chairperson)

Maria Landron (Local, Non-Affiliated Member)

Brandy Nelson (Institutional Member)

Delena Mazzetti (Biological Safety Officer)

Mike Mendenhall (Local, Non-Affiliated Member)

Carol Pickett (Local, Non-Affiliated Member)

Arthur Hunt (Plant Containment Expert)

Delphine Malherbe (Laboratory Staff Representative)

Carrie Shaffer (institutional Member)

Yadi Wu (Institutional Member)

Regrets

Jan Smalle (Plant Containment Expert)

Cheryl Haughton (Animal Containment Expert)

Amelia Pinto (Institutional Member)

Guests

Marisa McGrath (Biological Safety Officer Associate)

Robert Hayman (Assistant Biological Safety Officer)

Jeff Howell (IBC Administrative Professional II)

Audra Strahl (IBC Administrative Professional II)

Melissa Hollifield (Animal Compliance Manager)

Elizabeth Brooks (Administrative Support Associate I)

Quorum

Per the University of Kentucky Institutional Biosafety Committee By-Laws, at least 6 voting members shall constitute a quorum.

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Approval of Previous Month's Meeting Minutes

2026.05.06 IBC Meeting Minutes DRAFT.pdf

The previous month's minutes were approved. Thomas Chambers initiated the motion. Carrie Shaffer seconded the motion. All members present (11) voted in favor.

Old Business

None.

New Business

Protocol Review

Resubmissions

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Amendments

PI: Xiangan Li
IBC Protocol Number: IBC-24-96
Protocol Title: The role of SR-BI in sepsis and in therapy-induced immune activation
Protocol Type: Amendment
Amendment To: Biological Safety Level (BSL), Cells or tissues used in research, Laboratory Location(s), Genetic constructs
Applicable Guidelines & Regulations: NIH Guidelines Section IV-B-7, OSHA Act of 1970 Clause 5(a)(1), OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.9, UK Administrative Regulation 6.3, NIH Guidelines Section III-F-1, NIH Guidelines Section III-D-1
Maximum Containment Level: Biological Safety Level 2+ (BSL2+), Animal Biological Safety Level 2 (ABSL2)
Primary Reviewers: C. Haughton, D. Harrison, C. Shaffer

Brief Project Overview:

Our study focuses on the role of scavenger receptor BI (SR-BI) in inflammatory diseases, including sepsis and lethal immune activation, and to translate the mechanistic studies into therapy.

SR-BI is a protein expressed in a number of tissues including liver, adrenal gland and endothelium. Studies including ours have shown that SR-BI plays protective roles in sepsis and lethal immune activation. The aims of this study are to investigate mechanisms of SR-BI protection in these diseases. To do so, we will use animal models that mimic these inflammatory diseases and use animals that lack SR-BI gene to elucidate the contribution of SR-BI to the pathogenesis of the diseases. We will also use in vitro cells to assess the function of SR-BI. We expect that completion of the designed experiments will provide insights into our understanding of these diseases so that we can develop potential therapies for the diseases.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Animal work (breeding, surgeries, etc.), Cell culture, Bacterial culture, Flow Cytometry/Cell Sorting, Histology, Immunohistochemistry, PCR/qRT-PCR, Use of Infectious Agents, Propagation of Infectious Agents, Use of viral vectors

Transport: Yes

Materials Transported: Biohazardous Materials

Infectious Agent(s)/Natural Host(s): Escherichia coli G58-1 (RG1-bacteria)/Human, mouse; Staphylococcus aureus (RG2-bacteria)/Human; Pseudomonas aeruginosa (RG2-bacteria)/Human; Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/Human

Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: SR-BI/SCARB1/human, mouse/membrane protein/expression in cell culture/cell lines/PCR2.1, PLNCX2, adenovirus

Vector(s) [Vector Category/Vector Technical Name]: Adenovirus/Ad-SRBI; Adenovirus/Ad-Null

Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Animal/macrophages; Animal/CHO cells; Human/HEK cells; Animal/CAR-T; Animal/endothelial cell; Animal/EA.hy926

Animal Use: Yes

Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Mouse/Staphylococcus aureus (RG2-bacteria)/i.n./anesthesia/ABSL2/lab coat, gloves, eye protection/ABSL2/Yes/No; Mouse/Pseudomonas aeruginosa (RG2-bacteria)/i.n./anesthesia/ABSL2/lab coat, gloves, eye protection/ABSL2/Yes/No; Mouse/Escherichia coli G58-1 (RG1-bacteria)/i.p./hand/ABSL1/lab coat, gloves, mask/ABSL1/Yes/No; Mouse/Cells - Animal, genetically modified/tail i.v./mouse restraint tube/ABSL1/lab coat, gloves, mask/ABSL1/No/No

Risk Assessment/Discussion:

Dr. Li has submitted an amendment to his current IBC protocol entitled The role of SR-BI in sepsis and in therapy-induced immune activation. In this amendment, Dr. Li is adding an adenovirus vector expressing SR-BI from collaborator Dr. Preetha Shridas for in vitro transductions. Following adenovirus transduction, cells will be treated with various lipoproteins, after which they will be lysed and processed for Western blot or ELISA assays. Work with adenovirus and adenovirus-treated cells will be completed using BSL2+ containment, including exclusive work in the BSC and use of dedicated lab coat or disposable lab gown until biohazardous materials have been inactivated via lysis buffer. The SR-BI/SCARB1 transgene is a membrane protein that is not known to be otherwise hazardous to humans. Dr. Shridas has UK IBC approval for use of this vector, which is obtained ready-made from Vector BioLabs. This project increases the biosafety level to BSL2+, previously BSL2.

IBC Discussion & Vote:

The amendment to IBC-24-96 (version 27.0) was approved pending minor modifications as listed below:

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ANIMAL RESEARCH – Animals with Biohazards table:

1. The corresponding IACUC protocol lists *E. coli* being administered to animals via IP and IV. Please update the entry to include the IV administration of *E. coli* to animals and ensure congruency between the corresponding IACUC protocol and this IBC protocol.
2. The corresponding IACUC protocol specifies that genetically modified CAR-T cells will be administered IP and not tail vein IV as currently stated. Please update to ensure congruency between the corresponding IACUC protocol and this IBC protocol.

INFECTIOUS AGENTS – Infectious Agent(s) table: Please update the *Escherichia coli* entry to include the Symptoms of Exposure and Route(s) of Exposure.

CELL LINES – Cells in use table: Please update the EA.hy926 entry to list the genus and species of the cells.

DISINFECTANTS, EMERGENCY RESPONSE, TRANSPORT, WASTE – Transport: If infected animals are being transported to BBSRB B0206 –14, and –15 for euthanasia, please add a checkmark to Animal transport and describe how infected animals are transported.

LOCATIONS – Research Locations table: The IACUC protocol indicates animal euthanasia in BBSRB B0206 –14, and –15. Please update the entry to include these procedures.

SCIENTIFIC SUMMARY:

1. Please remove any inactive projects from the protocol.
2. Include more information about how the adenovirus will be propagated by the source laboratory. More detail about the workflow is requested.
3. Please briefly address the addition of the EA.hy926 cell line. It's not clear what these cells are used for in relation to the work described here.
4. Will adenovirus or adenovirus-transduced cells be centrifuged? Please clarify. If these materials will be centrifuged, please briefly describe how this is done safely using aerosol-tight safety rotors/buckets.

Doug Harrison initiated the motion. Carrie Shaffer seconded the motion. All IBC members present (11) voted in favor of the motion.

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Conflicts of Interest: None

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PI: Stefan Stamm
IBC Protocol Number: IBC-25-37
Protocol Title: Regulation of alternative pre-mRNA processing in Prader Willi syndrome and tauopathies
Protocol Type: Amendment
Amendment To: Personnel

Applicable Guidelines & Regulations: NIH Guidelines Section III-F-1, NIH Guidelines Section III-F-3, NIH Guidelines Section IV-B-7, OSHA Act of 1970 Clause 5(a)(1), UK Administrative Regulation 6.3, OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.9, NIH Guidelines Section III-E-1, NIH Guidelines Section III-D-4
Maximum Containment Level: Biological Safety Level 2 (BSL2), Animal Biological Safety Level 1 (ABSL1)
Primary Reviewers: C. Haughton, M. Mendenhall, Y. Wu
Brief Project Overview:
Our laboratory studies alternative pre-mRNA splicing, a central process in human gene regulation. Almost all human genes undergo pre-mRNA splicing and with a few exceptions all genes are alternatively spliced, i.e. they form more than one isoform from a given piece of DNA, because the intermediate form, RNA, is spliced in different (alternative) ways. We focus on the deregulation of alternative splicing seen in human diseases, in particular in Prader-Willi syndrome and Alzheimer's disease. Prader-Willi syndrome is caused by the loss of gene expression that contains two clusters of snoRNAs (small nucleolar RNAs), SNORD115 and SNORD116. We found that these SNORDs regulate alternative splicing and gene expression of a number of genes.

The second disease that we are studying is Alzheimer's disease (AD), where alternative splicing of the microtubule associated protein tau is changed in the disease. We found that this gene creates a circular RNA through a backsplicing mechanism. This novel RNA could generate the tau protein deposits characteristic for Alzheimer's disease. Importantly we found that these circular RNAs are translated after undergoing RNA changes. We raised antisera against several circRNA-encoded proteins from the microtubule associated protein tau, amyloid precursor protein and presenelin genes. The work on AD is done in collaboration with Peter Nelson from the Center of Aging at UK.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Bacterial culture, Cell culture, DNA/RNA isolation/purification, Imaging/Microscopy, Immunohistochemistry, PCR/qRT-PCR, Transfection, Use of Human Source Material(s), Use of viral vectors, Animal work (breeding, surgeries, etc.)
Transport: Yes
Materials Transported: Biohazardous Materials
Infectious Agent(s)/Natural Host(s): Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/Human
Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: serotonin receptor 2C/human, via addgene/membrane protein/cloned into pcDNA3.1 expressed in HEK293/Hela cells as a reporter/E. coli/Plasmid/; microtuble associated protein tau/human, via addgene/housekeeping gene/cloned into pcDNA3.1, expressed into HEK293 as a reporter/E. coli/Plasmid/; synaptophysin like protein 1/human, via addgene/membrane protein/cloned into pcDNA3.1, expressed into HEK293/E. coli/Plasmid/; tau circular RNAs (circTau)/human, via addgene/housekeeping gene/cloned into pcDNA3.1, expressed into HEK293/E. coli, mouse, human neuronal cells/Plasmid, AAV9/; HIPK3 circular RNAs/human, via Synbio or VectorBuilder/serine/threonine kinase/circRNA expression construct/E. coli, mouse, human neuronal cells/Plasmid, AAV9/

Vector(s) [Vector Category/Vector Technical Name]: Plasmid/pEGFP; Plasmid/pcDNA3.1; Plasmid/pCR2.1; Plasmid/pUC18; Adeno-Associated Virus (AAV)/AAV9
Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Human/Hela Cells; Human/HEK293 cells; Human/SH-SY5Y;
Animal Use: Yes
Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Mouse/Viral Vector - Adeno-Associated Virus (AAV)/Stereotactic Injection /Isoflurane Anesthesia/ABSL1/Gloves, Lab Coat, Eye Protection/ABSL1/No//

Risk Assessment/Discussion:

Dr. Stamm has submitted an amendment to his current IBC protocol entitled Regulation of alternative pre-mRNA processing in Prader Willi syndrome and tauopathies. In this amendment, Dr. Stamm has added personnel and a new project utilizing siRNAs and/or ssDNAs in mice. Specifically, these synthetic oligos will be co-injected with AAV that expresses circTau 12-7 constructs (previously approved). Procedures will remain the same as previously approved for AAV mouse injections. After co-injection of synthetic oligos and AAV expressing circ-Tau RNA, expression of circTau RNAs will be determined using RT-PCR and translation determined via Western blot. This work will be done using BSL1/ABSL1 containment. PPE remains as previously approved and includes lab coat, gloves, and eye protection. The synthetic oligos cannot replicate. This new project does not significantly alter the risk of work with biohazardous materials as previously approved for Dr. Stamm.

IBC Discussion & Vote:

The amendment to IBC-25-37 (version 33.0) was approved.

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Michael Mendenhall initiated the motion. Yadi Wu seconded the motion. All IBC members present (11) voted in favor of the motion.

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Conflicts of Interest: None

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PI: Sheng Tong
IBC Protocol Number: IBC-25-47
Protocol Title: Development of magnetic-responsive nanomaterials for disease treatment
Protocol Type: Amendment
Amendment To: Cells or tissues used in research, Genetic constructs
Applicable Guidelines & Regulations: NIH Guidelines Section III-E, NIH Guidelines Section III-F-1, NIH Guidelines Section III-F-8, NIH Guidelines Section IV-B-7, OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.3, UK Administrative Regulation 6.9, NIH Guidelines Section III-D-2, NIH Guidelines Section III-D-4, OSHA Act of 1970 Clause 5(a)(1), NIH Guidelines Section III-D-1

Maximum Containment Level: Animal Biological Safety Level 1 (ABSL1), Biological Safety Level 2 - Enhanced (BSL2+)
Primary Reviewers: C. Haughton, Y. Wu, M. Mendenhall
Brief Project Overview:
The goal of our research is to develop advanced materials/therapeutic strategies for precision medicine. The research can be broadly divided into two categories based on the materials. First is to design magnetic nanoparticle (MNP)-based cancer therapy. Here the MNPs are used as the carriers for therapeutic agents. The second is to design magnetic nanoparticles/baculoviral vectors (MNP-BV) for gene editing of disease-causing genetic mutations in the body. We will combine nanotechnology and synthetic biology approaches to achieve effective and targeted treatment of the tissue of the cell populations involved in the disease progression.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: DNA/RNA isolation/purification, Creation of viral vectors, Cell culture, Bacterial culture, Animal work (breeding, surgeries, etc.), Genetics, Flow cytometry/Cell sorting, Histology, Imaging/Microscopy, Immunohistochemistry, PCR/qRT-PCR, Transfection, Transformation, Use of Human Source Material(s), Use of viral vectors, Viral culture
Transport: Yes
Materials Transported: Animals, Biohazardous Materials
Infectious Agent(s)/Natural Host(s): Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/ Human
Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: Green Fluorescent Protein (GFP)/Jellyfish/tracking gene /Expression/Mouse cells, mouse/p-CMV-GFP, Ad-GFP/; iRFP/Rhodopseudomonas palustris /tracking gene /Expression/Mouse cells, mouse/piRFP670-N1; Baculovirus/; Luciferase /Firefly/tracking gene /Expression/Mouse cells, mouse/Luciferase-pcDNA3; Baculovirus/; humanized S. pyogenes Cas9 /S, pyogenes/Gene editing /Knockdown /Mouse cells, mouse/pX330-U6-Chimeric_BB-CBh-hSpCas9; Baculovirus /; HIF1a/HIF2a/Human/transcription factor/Knockdown/Mouse cells, mouse/pX330/; PDL1/Human and mouse/Immune checkpoint/Knockdown/Mouse cells, mouse, human tissue/pX330/; Hemoglobin (HBB)/Mouse, Human/Blood protein/Repair/Mouse, Human cells/pX330/; CD47/Mouse/Self antigen/Knockdown/Mouse/pX330/; B2M/Mouse/Immune protein/Knockdown/Mouse/pX330/; Tfdp1/Mouse, human/Transcription factor/Knock down/Mouse, human/pX330/; HRas/Mouse, human/small GTPases/Knock down/Mouse, human/pX330/
Vector(s) [Vector Category/Vector Technical Name]: Baculovirus/pFastBac /; Plasmid/pX330-U6-Chimeric_BB-CBh-hSpCas9 /; Plasmid/pFastBac-ef1a-eGFP /; Plasmid/piRFP670-N1 /; Plasmid/Luciferase-pcDNA3 /; Plasmid/pSpCas9(BB)-2A-GFP (PX458) /; Adenovirus/Ad-GFP/
Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Animal/MC38/; Animal/KPC/; Animal/Hepa 16/; Insect/Sf9/; Animal/Pan02/; Animal/B16/BL6/; Animal/B16/F10/; Animal/E0771/; Animal/4T1/; Animal/Epithelial Cells /; Animal/Fibroblasts /; Animal/Hepatocytes /; Animal/RAW264.7/; Human/Jurkat /; Animal/MOC2/; Animal/MOC1/; Human/HeLa/; Animal/Bone marrow derived cells/
Animal Use: Yes

Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Mouse/Viral Vector – Adeno-Associated Virus (AAV)/Intra-Cranial Injections/Isoflurane-anesthesia/ABSL1/Lab coat, gloves and eye protection/ABSL1/No/None/; Mouse/Nanoparticle-r/sDNA/Intratumoral and intravenous injection/Anesthetized/ABSL1/Gloves, lab coat, goggles/ABSL1/No//; Mouse/Viral Vector - Baculovirus/Intratumoral and intravenous injection/Anesthetized/ABSL1/Gloves, lab coat, goggles/ABSL1/No//; Mouse/Viral Vector - Adenovirus/Intratumoral injection/Anesthetized/ABSL2/Gloves, lab coat, goggles/ABSL2/Yes//

Risk Assessment/Discussion:

Dr. Tong has submitted an amendment to his currently approved IBC protocol entitled Development of magnetic-responsive nanomaterials for disease treatment. In this amendment, Dr. Tong has updated laboratory locations, gene targets, and a project involving the administration of an adenovirus vector expressing GFP to mice carrying xenograft tumors. The adenovirus will be purchased from Vector BioLabs ready-made and will not be produced/packaged in Dr. Tong's laboratory. Work with adenovirus will be done at BSL2+ containment and includes exclusive use of a BSC (no open bench work). Adenovirus will be injected intratumorally into mice carrying xenograft tumors within a BSC at ABSL2 containment. Mice will be housed at ABLS2 housing for 2-3 days after injections, after which mice will be euthanized and blood, tumor and major organs collected for analysis of GFP expression via fluorescence imaging and qPCR. The adenovirus transgene, GFP, is a fluorescent reporter and is not known to be hazardous. The two new gene targets for CRISPR/Cas knockdown via magnetic nanoparticles (MNPs) and baculoviral vectors (BVs) are Tfdp1, an oncogenic transcription factor, and HRas, an oncogene. The use of MNPs and BVs in Dr. Tong's laboratory has been previously reviewed and approved. The addition of the adenovirus project moves the biological safety level to BSL2+.

IBC Discussion & Vote:

The amendment to IBC-25-47 (version 42.0) was approved pending minor modifications as listed below:

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SCIENTIFIC SUMMARY -

1. Please describe the purpose of the adenoviral vector that was added to this amendment. Provide brief justification as to why an adenovirus is required for GFP expression in these experiments instead of a vector with lower inherent risk, such as AAV.
2. It is unclear why the two new gene targets, Tfdp1 and HRas, were added to the protocol. Please briefly describe the new gene targets, their function, and the purpose of adding them in this amendment.

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Michael Mendenhall initiated the motion. Yadi Wu seconded the motion. All IBC members present (11) voted in favor of the motion.

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Conflicts of Interest: None

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PI: Christopher Richards
IBC Protocol Number: IBC-26-33
Protocol Title: Identification of novel cancer therapies
Protocol Type: Amendment
Amendment To: Cells or tissues used in research, Manipulations planned
Applicable Guidelines & Regulations: NIH Guidelines Section III-D-1, NIH Guidelines Section III-F-1, NIH Guidelines Section IV-B-7, OSHA Act of 1970 Clause 5(a)(1), OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.3, UK Administrative Regulation 6.9
Maximum Containment Level: Biological Safety Level 2 - Enhanced (BSL2+), Animal Biological Safety Level 2 (ABSL2)
Primary Reviewers: C. Haughton, B. Nelson, D. Harrison

Brief Project Overview:

Ovarian cancer (OC) and lung cancer (LC) are among the most commonly occurring cancers worldwide. In the United States, OC is the fifth leading cause of cancer death among women and LC remains one of the most deadly forms of cancer. In Kentucky, rates of incidence and death from lung cancer are the highest in the nation. Although recent studies have led to a greater understanding of OC and LC development and progression, treatments have not proven to be effective in clinical trials. In children, acute myeloid leukemia (AML) makes up about 15 percent of childhood leukemia, and osteosarcoma (OS) is the most common bone cancer in children. While standard chemotherapy treatments have greatly improved the overall survival of children with AML and OS, there have been limited improvements in therapies in recent decades.

Therefore, it is critically important to identify new therapies for these cancers. A powerful method for better identifying novel therapies is through precision medicine, where the unique characteristics of a patient's tumor are used to tailor tumor-specific treatment. The aims of this proposed research are to 1) identify a panel of drugs that target key genes involved in AML, LC, or OC and test their ability to inhibit cancer cell growth, 2) establish and characterize the genetic profiles of xenografts generated from freshly isolated AML and OC tissue and commercially available cancer cell lines, 3) identify novel therapies specific for each unique tumor profile that inhibit cell growth in OC, LC, pediatric AML and pediatric OS xenograft models, and 4) test a novel drug delivery therapeutic in OC and OS cell lines and xenograft models. The research plans described in this proposal should identify novel therapeutic strategies which can be taken to clinical trials, improving current treatment regimens.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Animal work (breeding, surgeries, etc.), Cell culture, Bacterial culture, DNA/RNA isolation/purification, Histology, Imaging/Microscopy, Immunohistochemistry, PCR/qRT-PCR, Transfection, Use of Human Source Material(s), Use of infectious agents, Use of viral vectors, Flow cytometry/Cell sorting

Transport: Yes

Materials Transported: Biohazardous Materials, Animals

Infectious Agent(s)/Natural Host(s): Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/Human

Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: Nrf2/ Homo sapiens/ Oncogene/ Silencing/ cell lines/ N/A; Keap1/ Homo sapiens/ Tumor Suppressor/ Silencing/ cell lines/ N/A; ERBB2/ Homo sapiens/ Oncogene/ Silencing/ cell lines/ N/A; ERBB3/ Homo sapiens/ Oncogene/ Silencing/ cell lines/ N/A; ERBB4/ Homo sapiens/ Oncogene/ Silencing/ cell lines/ N/A; EGFR/ Homo sapiens/ Oncogene/ Silencing/ cell lines/ N/A; ABCB1/ Homo sapiens/ Membrane protein/ Silencing/ cell lines/ N/A; KRT81/ Homo sapiens/ Structural/ Silencing/ cell lines/ N/A; rFLuc/ Luciola cruciate/ Tracking gene/ Expression/ cell lines/ pLL-CMV-rFLuc-T2A-GFP-mPGK-Puro; GFP/ Aequorea victoria/ Tracking gene/ Expression/ cell lines/ pLL-CMV-rFLuc-T2A-GFP-mPGK-Puro; SLCO2B1/ Homo sapiens/ Membrane protein/ Silencing/ cell lines/ N/A; SLC22A4/ Homo sapiens/ Membrane protein/ Silencing/ cell lines/ N/A; BCL2/ Homo sapiens/ Mitochondrial protein/ Silencing/ cell lines/ N/A; BCL-xL/ Homo sapiens/ Mitochondrial protein/ Silencing/ cell lines/ N/A; CHOP/DDIT3/ Homo sapiens/ cytoplasmic and nuclear protein/ Silencing/ cell lines/ N/A; GBP1/ Homo sapiens/ Endoplasmic Reticulum protein/ Silencing/ cell lines/ pLentiCRISPRv2-puro ; GBP5/ Homo sapiens/ Endoplasmic Reticulum protein/ Silencing/ cell lines/ pLentiCRISPRv2-puro ; CD40/ Homo sapiens/ Membrane protein/ Silencing/ cell lines/ pLentiCRISPRv2-puro ; NFKB/ Homo sapiens/ Nuclear protein/ Silencing/ cell lines/ pLentiCRISPRv2-puro ; RASD2/ Homo sapiens/ Cytoplasmic protein/ Silencing/ cell lines/ pLentiCRISPRv2-puro ;clyA/ E. coli/ Transmembrane/ expression/ cell lines/ sfGFP-pBAD; ICOS/ Mus musculus/ surface receptor/ expression/ cell lines/ pCMV-3-Flag. pLenti-C-mGFP-P2A-Puro; DCT (encodes Trp2)/ Mus musculus/ enzyme/ expression/ cell lines/ sfGFP-pBAD; PDCD1 (encodes PD1)/ Homo sapiens; Mus musculus/ surface receptro/ expression/ cell line/ pCMV-3-N-Flag/sfGFP-pBAD/ pLenti-C-mGFP-P2A-Puro; SIRP alpha/ Homo sapiens/ surface receptor/ expression/ cell lines/ pCMV6-entry; Kcna3/ Mus musculus/ Voltage gated membrane channel/ expression/ cell lines/ pLenti-C-mGFP-P2A-Puro; Cas9/ Streptococcus pyogenes/ endonuclease/ expression/ cell lines/ pLentiCRISPRv2-puro; Piezo1/ Mus musculus/ Mechanosensitive channel/ expression/ cell lines/ pLenti-C-mGFP-P2A-Puro; ICAM1/ Homo sapiens; Mus musculus/ surface receptor/ expression/ cell lines/ pLenti-C-mGFP-P2A-Puro

Vector(s) [Vector Category/Vector Technical Name]: Naked nucleic acid/siRNA; Lentivirus/pLL-CMV-rFLuc-T2A-GFP-mPGK-Puro; Lentivirus/pLenti-C-mGFP-P2A-Puro; Lentivirus/ pLentiCRISPRv2-puro; Plasmid/pcdna3.1; Plasmid/sfGFP-pBAD; Plasmid/pET45; Plasmid/pCMV-3-Flag; Plasmid/pCMV3-SP-N-Flag; Plasmid/pCMV6-Entry

Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Human/ HCT116/ ; Human/ HT29/ ; Human/ pt 93/ ; Human/ pt 130/ ; Human/ pt 2387/ ; Human/ pt 2377 LM/ ; Human/ pt 2377 PT/ ; Human/ Jackson Labs OC PDX derived cells/ ; Human/ Charles River Lab OC PDX derived cells/ ; Human/ Caov-3/ ; Human/ OVCAR-3/ ; Human/ UWB1.289/ ; Human/ SW 626/ ; Human/ A549/ ; Human/ Univ. of Miami OC cell lines/ ; Human/ UK OC cell lines/ ; Human/ UK lung cancer cell lines/ ; Human/ H226/ ; Human/

H1299/ ; Human/ H1563/ ; Human/ UK057/ ; Human/ UK022/ ; Human/ UK062; Human/ UK032; Human/ UK068/ ; Human/ Monocytes/ ; Human/ Macrophages/ ; Human/ TOV21G/ ; Human/ HOS (KRIB) ; Human/ 143B/ ; Animal/ RAW 264.7/ ; Human/ MV4-11/ ; Human/ M07e/ ; Human/ THP-1/ ; Human/ OV-90/ ; Human/ SKOV-3/ ; Human/ OVCAR-8/ ; Human/ Normal human ovarian epithelial cells/ ; Human/ FaDu/ ; Human/ UM-SCC-47/ ; Human/ CAL 27/ ; Animal/ STOSE/ ; Human/ iPSC 802-3G/ ; Animal/ B16F10/ ; Animal/ K7M2/ ;

Animal Use: Yes

Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Mouse/Cells - Human, non-modified/intravenous, intraperitoneal, subcutaneous injection, intratibial injection/isoflurane anesthesia, mechanical restrainer for tail vein injections/ABSL2/disposable gown, gloves, head cover, shoe covers, eye protection, surgical mask/ABSL1/No/Administration of biohazardous materials to mice will take place within a BSC. Following implantation/injection of cells there are no special handling procedures and animals can be handled at ABSL1; Mouse/Cells - Human, genetically modified/intravenous, intraperitoneal, subcutaneous injection, intratibial injection/ isoflurane anesthesia, mechanical restrainer for tail vein injections/ABSL2/disposable gown, gloves, head cover, shoe covers, eye protection, surgical mask / ABSL1/No/Administration of biohazardous materials to mice will take place within a BSC. Following implantation/injection of cells there are no special handling procedures and animals can be handled at ABSL1; Mouse Tissue - Human (ex. PDX tumor tissue)/intravenous, intraperitoneal, subcutaneous injection, intratibial injection isoflurane anesthesia, mechanical restrainer for tail vein injections ABSL2 disposable gown, gloves, head cover, shoe covers, eye protection, surgical mask/ABSL1 No Administration of biohazardous materials to mice will take place within a BSC. Following implantation/injection of cells there are no special handling procedures and animals can be handled at ABSL1; Mouse/Cells - Animal, genetically modified/intravenous, intraperitoneal, subcutaneous injection, intratibial injection/isoflurane anesthesia, mechanical restrainer for tail vein injections/ABSL2/disposable gown, gloves, head cover, shoe covers, eye protection, surgical mask/ABSL1/No/Administration of biohazardous materials to mice will take place within a BSC. Following implantation/injection of cells there are no special handling procedures and animals can be handled at ABSL1

Risk Assessment/Discussion:

Dr. Richards has submitted an amendment to his currently approved IBC protocol entitled Identification of novel cancer therapies. In this amendment, Dr. Richards has added a new 3rd generation lentivirus construct to express Piezo1, a mechanosensitive channel, in cells. This new lentivirus construct will be used in conjunction with a previously approved lentivirus construct expressing Kcna3, a voltage-gated potassium channel, to transduce murine primary T cells isolated from BALB/c or FVB/N mice. Stable transduction will be confirmed via Western blot or flow cytometry and used to treat mice with subcutaneous ovarian cancer or osteosarcoma tumor that have been implanted with steel or platinum electrodes 7 days prior to injection. T cells will be injected retro-orbitally in mice that have been anesthetized with isoflurane. Mice will be housed at ABSL2 containment for 72-hours, after which they

will be moved to ABSL1 containment. Mice will then undergo 7-21 days of stimulation cycles to promote T cell infiltration into the tumor, after which mice will be euthanized and blood and tissue collected for further downstream analysis. The new lentivirus construct will be obtained from Origene and not constructed in the Richards' lab. Work with lentivirus will be done using BSL2+ containment, as previously described and approved. This new project is very similar to previously approved work in Dr. Richards' laboratory and does not significantly alter the biohazardous risks associated with this IBC protocol.

IBC Discussion & Vote:

The amendment to IBC-26-33 (version 20.0) was approved pending minor modifications as listed below:

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PERSONNEL: V. Paulauskas is listed in the SciSure laboratory personnel as Works with Biohazardous Agents / Potentially Infectious Material, Works with Biological Safety Cabinets. If V. Paulauskas is an active lab member, please add them to the IBC personnel list.

TRAINING: Please ensure training for V. Paulauskas is current, if applicable.

RECOMBINANT and/or SYNTHETIC NUCLEIC ACID MATERIALS – Gene Information table: The IACUC protocol states that CAR-T cells would be modified to overexpress either KV1.3 or Piezo1. Only Piezo1 was added to the Gene Information table. If the Kcna3 entry encompasses KV1.3, please add KV1.3 to the Kcna3 Gene Name text "Kcna3 (KV1.3)."

LOCATIONS – Research Locations table: In addition to the Todd DLAR facility, the IACUC also indicates that animals will be housed in the BBSRB DLAR facility. Please update to ensure congruency.

*

Doug Harrison initiated the motion. Brandy Nelson seconded the motion. All IBC members present (11) voted in favor of the motion.

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Conflicts of Interest: None

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New Protocols

PI: Elizabeth Abshire
IBC Protocol Number: IBC-26-45
Protocol Title: Manipulations of EJC and splicing factor gene expression in mammalian cells
Protocol Type: New Protocol
Amendment To: N/A
Applicable Guidelines & Regulations: NIH Guidelines Section III-E-1, OSHA Act of 1970 Clause 5(a)(1), OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.3, UK Administrative Regulation 6.9, NIH Guidelines Section IV-B-7, NIH Guidelines Section III-D-1, NIH Guidelines Section III-D-2

Maximum Containment Level: Biological Safety Level 2 - Enhanced (BSL2+)
Primary Reviewers: D. Malherbe, C. Pickett, T. Chambers

Brief Project Overview:

This project will examine what happens to mammalian cells when members of the spliceosome and exon junction complex (EJC) are knocked down or mutated using transfection or transduction with plasmid DNA and/or siRNAs. We will look at how these changes affect the way EJCs form and how they influence cellular mRNA metabolism. This includes how mRNA is made, moved around the cell, used to make proteins, and degraded. To study this, we will use methods including cell culture, immunoprecipitation, western blotting, RT qPCR, RNA Seq, and proteomics.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Bacterial culture, Cell culture, Creation of viral vectors, DNA/RNA isolation/purification, Flow cytometry/Cell sorting, Imaging/Microscopy, PCR/qRT-PCR, Proteomics, Transfection, Transformation, Use of viral vectors, Use of Human Source Material(s), Immunohistochemistry

Transport: Yes

Materials Transported: Biohazardous Materials

Infectious Agent(s)/Natural Host(s): Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/Humans

Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: EIF4A3/ Human / mRNA regulatory protein/ Protein expression/ human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; RBM8A/ Human / mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; MAGOH/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; CASC3/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; RNPS1/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; ACIN1/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; SAP18/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; UPF3A/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; UPF3B/ Human/ mRNA regulatory protein/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; CWC22/ Human/ Splicing factor/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; EFTUD2/ Human/ Splicing factor/ Protein expression/ Human and mouse cells/ pcDNA3.1(+), pcDNA3.1(-), pcDNA5/FRT/TO, pCMV; EIF4A3/ Human / mRNA regulatory protein/ Tagging of endogenous gene (dTAG)/ human and mouse cells/ pcDNA3.1; CASC3/ Human / mRNA regulatory protein/ Tagging of endogenous gene (dTAG)/ human and mouse cells/ pcDNA3.1(+);

RNPS1/ Human / mRNA regulatory protein/ Tagging of endogenous gene (dTAG)/ human and mouse cells/ pcDNA3.1; EIF4A3/ Mouse/ mRNA regulatory protein/ Dox-inducible protein expression/ mouse cells/ pCW57.1; UPF3B/ Mouse/ mRNA regulatory protein/ Dox-inducible protein expression/ mouse cells/ pCW57.1; mCherry/ Synthetic/Engineered from Discosoma/ Fluorescent protein/ Tracking transfection/transduction of cells/ Human and mouse cells/ pU6-(BbsI)_CBh-Cas9-T2A-mCherry; Cas9/ Streptococcus pyogenes/ DNA endonuclease/ Genome editing/ Human and mouse cells/ pU6-(BbsI)_CBh-Cas9-T2A-mCherry, Lenti-Cas9-gRNA-GFP

Vector(s) [Vector Category/Vector Technical Name]: Plasmid/pcDNA 3.1; Plasmid/pcDNA5/FRT/TO; Plasmid/pCMV; Plasmid/pET28a; Plasmid/pU6-(BbsI)_CBh-Cas9-T2A-mCherry;Lentivirus/pCW57.1

Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Human/HEK293T; Animal/C2C12; Human/SH-SY5Y; Animal/N2a; Human/Flp-In™ T-REx™ 293

Animal Use: No

Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: N/A

Risk Assessment/Discussion:

Dr. Abshire is a new PI at UK and has submitted an IBC protocol entitled Manipulations of EJC and splicing factor gene expression in mammalian cells. Dr. Abshire's laboratory seeks to understand what happens in mammalian cells when members of the spliceosome and exon junction complex (EJC) are knocked down or mutated via transfection/transduction with plasmid DNA and/or siRNAs. Towards that aim, Dr. Abshire's laboratory will utilize cell culture, lentivirus transduction, immunoprecipitation, Western blotting, RT qPCR, RNA Seq, and proteomics techniques. 3rd generation lentiviral vectors are generated in Dr. Abshire's laboratory using BSL2+ containment, including dedicated PPE (lab coat, gloves, eye protection) and work exclusively inside the BSC. The lentivirus transgenes are not known to be oncogenic or otherwise hazardous. Cells transduced with lentivirus will be cultured for at least 48-72 hours post-transduction. Further manipulations of these cells (immunoprecipitation, Wester blotting, etc.) will be done no sooner than 72 hours post-transduction. Biohazardous materials are inactivated via lysis, boiling in SDS, addition of Trizol, or fixation with 4% paraformaldehyde, after which work will be conducted using BSL1 containment. CRISPR/Cas9 will also be used to knock-in degron tags or introduce exogenous tagged Eif4A3 and Upf3b in mouse cells via transfection and lentivirus methods. Live, unfixed cells will be sorted/subject to flow cytometry in the UK FCIM core facility. The cell sorter in use is contained within a BSC and disinfected between uses with 10% bleach. Dr. Abshire's IBC protocol does not involve the use of animals.

IBC Discussion & Vote:

The protocol IBC-26-45 (version 8.0) was approved pending minor modifications as listed below:

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INFECTIOUS AGENTS – Equipment disinfection table: Please update the table to include the use of 10% bleach in the relevant locations.

RECOMBINANT and/or SYNTHETIC NUCLEIC ACID MATERIALS – Gene Information table: Please clarify which of the genes listed will be targeted for siRNA knockdown by updating the "Use of Construct" column entry. Ensure all gene targets are listed here.

LOCATIONS – Biological Safety Equipment: The certification expiration dates for the biological safety cabinets listed in BBSRB B0116B are due to lapse in less than one week. Please update the table with the new certification expiration dates.

SCIENTIFIC SUMMARY:

1. For each assay, please list details about whether work is being performed on the benchtop, a procedure room, or in a biological safety cabinet.
2. Please include a discussion about the source, function, and relevance of the target genes.
3. Please clarify that BSL2 work will not take place at the same time as any BSL2+ work. Signage should be posted during BSL2+ work to communicate ongoing BSL2+ work. See https://researchsafety.uky.edu/sites/default/files/2025-11/bsl2-enhanced-precautions.pdf for example.
4. Add more detailed discussion of the lentivirus production steps.
5. Please acknowledge the role of the EJC dysregulation in cancer development.

*

Tom Chambers initiated the motion. Carol Pickett seconded the motion. All IBC members present (11) voted in favor of the motion.

*

Conflicts of Interest: None

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Renewals

PI: David Rodgers
IBC Protocol Number: IBC-26-52
Protocol Title: B23-4189: Cavities in Choline Acetyltransferase and Neuromuscular Disorders
Protocol Type: Renewal
Amendment To: N/A
Applicable Guidelines & Regulations: NIH Guidelines Section III-D-4, NIH Guidelines Section III-F-1, NIH Guidelines Section IV-B-7, OSHA Act of 1970 Clause 5(a)(1), UK Administrative Regulation 6.3, UK Administrative Regulation 6.9
Maximum Containment Level: Biological Safety Level 2 (BSL2)
Primary Reviewers: D. Harrison, M. Landron, C. Picket

Brief Project Overview:

The purpose of the research project is to investigate how inherited mutations in the enzyme choline acetyltransferase (ChAT), which makes the neurotransmitter acetylcholine, cause it to malfunction. Over

thirty different mutations in the enzyme have been identified in patients who have defects in skeletal muscle function as a result of insufficient acetylcholine production.

We have proposed that ChAT has an unusual structure that makes it more susceptible than most proteins to disruption by single mutations. In this project, we will test a key aspect of this proposal by making secondary mutations to stabilize the enzyme structure and determining if they reduce the effects of the inherited mutations. Ultimately, we hope the work will allow us to develop a new approach for treating the muscular disorders, which can be fatal or severely debilitating.

We will produce variants of the enzyme by inserting a gene coding for it into a strain of the bacterium E. coli. Bacteria will then be grown and induced to make the needed amounts of the choline acetyltransferase variants. The variants will be purified and their ability to produce acetylcholine assessed. We will also introduce some variants into cultured rat cells that are often used as a model for neuronal cells and assess their ability of the variants to make acetylcholine in a more biological context. To test acetylcholine production in a biological context, we have also obtained fruit flies that have a variant of choline acetyltransferase that allows us to turn off acetylcholine production by raising the temperature of the fly cultures. We have then introduced wild type and a mutant version of the rat choline acetyltransferase gene and shown the wild type enzyme rescues acetylcholine production at high growth temperature but the mutant does not. We are screening small molecule activators of choline acetyltransferase as possible therapeutics with this system.

The risks associated with this work are minimal for a number of reasons. The bacteria utilized in this study are commonly used in many research projects and are known to be noninfectious and unable to grow without the supplemental nutritional sources employed in the laboratory. The great deal of experience with the cultured rat cells has also shown them to be minimally hazardous themselves and to be highly unlikely to carry any agents toxic to humans. The DNA molecules used to express the enzyme are designed for this purpose and known to be non toxic. Mutants of ChAT are not known or anticipated to have any gain of function that would be of concern. The model fruit fly system is also a well established laboratory model with minimal risks. All waste will be treated to ensure that no live cells leave the laboratory.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Bacterial culture, Cell culture, DNA/RNA isolation/purification, Transfection, Transformation, Animal work (breeding, surgeries, etc.)
Transport: No
Materials Transported: N/A
Infectious Agent(s)/Natural Host(s): N/A
Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: ChAT/Rattus norvegicus/enzymatic protein/expression/E. coli/ pLENTY, pET-32a, or pcDNA3

Vector(s) [Vector Category/Vector Technical Name]: Plasmid/pLENTY; Plasmid/pET-32a; Plasmid/pcDNA3

Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Animal/PC12

Animal Use: Yes
Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: N/A

Risk Assessment/Discussion:
Dr. Rodgers has submitted a renewal of his IBC protocol entitled Cavities in Choline Acetyltransferase and Neuromuscular Disorders. Dr. Rodger's laboratory seeks to understand how inherited mutations in the choline acetyltransferase (ChAT) enzyme cause skeletal muscle dysfunction because of insufficient acetylcholine production. Towards that goal, Dr. Rodger's laboratory will utilize bacterial expression in lab strain E. coli for plasmid propagation and protein production of ChAT. Protein will be purified for stability and kinetic assays as well as crystallization and structure determination. Mutant ChAT constructs will be expressed in PC12 cells via pcDNA3 plasmid transfection. Stable cells will be isolated, and cells assayed for intracellular acetylcholine. Lastly, Dr. Rodger's laboratory utilizes a Drosophila model. Transgenic Drosophila expressing rat choline acetyltransferase and mutant have been obtained from Genetic Services Inc and are propagated in the laboratory for assessment of acetylcholine production. Work described in this IBC protocol will be completed using BSL1 containment. Personal protective equipment (PPE) for all manipulations includes lab coat, disposable gloves, and eye protection. Dr. Rodger's current IBC protocol will expire on June 13, 2026.

IBC Discussion & Vote:

The protocol renewal IBC-26-52 (version 5.0) was approved pending minor modifications as listed below:

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NIH GUIDELINES and OTHER APPLICABLE REGULATIONS: Please update the section to include a checkmark by NIH Guidelines Section III-F-2.

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Doug Harrison initiated the motion. Carol Pickett seconded the motion. All IBC members present (11) voted in favor of the motion.

*

Conflicts of Interest: None

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PI: Eddy Yang
IBC Protocol Number: IBC-26-54
Protocol Title: Novel combination therapies to treat cancer
Protocol Type: Renewal
Amendment To: N/A
Applicable Guidelines & Regulations: NIH Guidelines Section III-D-4, NIH Guidelines Section III-E-1, NIH

Guidelines Section III-F-1, NIH Guidelines Section IV-B-7, OSHA Act of 1970 Clause 5(a)(1), OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.3, UK Administrative Regulation 6.9, NIH Guidelines Section III-F-2
Maximum Containment Level: Biological Safety Level 2 (BSL2), Animal Biological Safety Level 2 (ABSL2)
Primary Reviewers: C. Haughton, M. Landron, B. Nelson

Brief Project Overview:

Triple-negative breast cancers (TNBCs) are highly aggressive, metastatic and recurrent. The standard chemotherapies and radiotherapies have marginal curative benefits but there is no efficacious targeted therapy. This project will develop and fully evaluate a new strategy, the combined dual-targeted mitochondrial luminoptogenetic gene therapy and synthetic lethality of poly (ADP-Ribose) polymerase inhibitor, to eliminate the metastatic and heterogeneous TNBCs.

We will evaluate the calpain-5/CAPN5 protease as a potential target in cancer therapy in cell culture experiments. CAPN5 is a protease enzyme that is activated by calcium. Abnormally high calcium levels were reported in a variety of cancers. The high expression of CAPN5 mRNA results in a poor prognosis in endometrial cancer. Suspected substrates of CAPN5 that play roles in DNA mismatch repair, transcriptional and hormonal regulation will be tested in CAPN5 proteolytic assay. The effect of the level of CAPN5 will be tested on the proliferation, viability and invasiveness of endometrial cancer cell lines, the levels of cancer-relevant CAPN5 substrates, and the ability of cancer cells to repair DNA damage. We will also develop a preclinical mouse model for CAPN5-high endometrial cancer. We will determine the metabolic changes in endometrial cancer cells caused by the high calpain-5 level by studying the levels of small molecules, the function of mitochondria and cellular energetics.

SFRT is short for Spatially Fractionated Radiotherapy. This is a treatment technique used in radiation therapy, in which the tumor isn't treated uniformly with radiation, but rather with a grid-pattern (this is typically referred to as GRID treatments) or with a lattice-pattern (this is typically referred to as Lattice therapy) of high and low dose. This project will investigate the different SFRT patterns and their effectiveness in killing cells. Materials used are immortal tumor cell lines (SCC2 and SCC6) and the non-cancerous MCF10A cells. We want to investigate the therapeutic gain of using different sized rods and different rod spacing for SFRT. Comparisons will be made of the different GRID pattern cell survival curves determining which pattern results in the most effective treatment.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Animal work (breeding, surgeries, etc.), Bacterial culture, Cell culture, DNA/RNA isolation/purification, Flow cytometry/Cell sorting, Histology, Imaging/Microscopy, Immunohistochemistry, PCR/qRT-PCR, Transfection, Transformation, Use of Human Source Material(s), Use of viral vectors, Genetics
Transport: Yes
Materials Transported: Biohazardous Materials
Infectious Agent(s)/Natural Host(s): Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/ Human
Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of

Construct/Host(s)/Vector(s)]: Renilla luciferase/Renilla reniformis/Luciferase/Reporter/Human cell lines/phRL-TK(Int-)/; Firefly luciferase/Photinus pyralis/Luciferase/Reporter/Human cell lines, mouse/pGL2-TATA-Inr/; Nanoluciferase NLuc/Oplophorus gracilirostris/Luciferase/Produces blue light to activate CoChR/mouse/pAAV-MCS/; Light-gated channelrhodopsin CoChR/Chloromonas oogama/Membrane protein/Light-gated channelrhodopsin, depolarizes the mitochondrial inner membrane/mouse/pAAV-MCS/; Calpain-5 CAPN5/Homo sapiens/Enzymatic protein/Expression/Human cell lines/p3xFLAG-CMV14, pEF1a-IRES-Neo/; Estrogen receptor alpha ESR1/Homo sapiens/Transcription factor/Expression/Human cell lines/pcDNA3.1 (+)/
Vector(s) [Vector Category/Vector Technical Name]: Adeno-Associated Virus (AAV)/pAAV-MCS/; Plasmid/p3xFLAG-CMV14/; Plasmid/pGL2-TATA-Inr/; Plasmid/phRL-TK(Int-)/; Plasmid/pcDNA3.1 (+)/; Plasmid/pEF1a-IRES-Neo/
Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Animal/4T1/; Animal/EMT6/; Human/293T/; Human/Ishikawa/; Human/KLE/; Human/SCC2/; Human/SCC6/; Human/MCF10A/
Animal Use: Yes
Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Mouse/Viral Vector - Adeno-Associated Virus (AAV)/Tail vein/Isoflurane anesthesia/ABSL1/Lab coat, gloves, eye protection/ABSL1/No/N/A/; Mouse/Cells - Human, non-modified/Subcutaneous injection/Isoflurane anesthesia/ABSL2/Eye protection and sterile lab coat, gloves, mask/ABSL1/No/These experiments will be done with immunocompromised nude mice, requiring extra caution to maintain sterility during handling and injection, and barrier housing./; Mouse/Cells - Human, genetically modified/Subcutaneous injection/Isoflurane anesthesia/ABSL2/Eye protection and sterile lab coat, gloves, mask/ABSL1/No/These experiments will be done with immunocompromised nude mice, requiring extra caution to maintain sterility during handling and injection, and barrier housing./; Mouse/Cells - Animal, genetically modified/Injection into mammary fat pad/Isoflurane anesthesia/ABSL1/Lab coat, gloves, eye protection/ABSL1/No/N/A/

Risk Assessment/Discussion:
Dr. Yang has submitted a renewal of his IBC protocol entitled Novel combination therapies to treat cancer. Dr. Yang's laboratory works to develop novel combination therapies against cancer using small molecular treatments, cancer gene therapy, and radiation therapy. Towards that goal, Dr. Yang describes three (3) distinct projects in his IBC protocol renewal. Project 1 seeks to develop a novel cancer gene therapy to be used in combination with PARP inhibitors to treat triple-negative breast cancers (TNBCs). In conjunction with their collaborator at Ohio State University, they have developed a new reagent called mAb-Exo-AAV. mAb-Exo-AAV is a monoclonal antibody-tagged exosome that contains the mLumiOpto constructed in a packaged AAV capsid. The monoclonal antibodies target EGFR and CD276, two cell surface proteins overexpressed in many TNBCs. The generation and packaging of the mAb-Exo-AAV reagent is done by their collaborator at Ohio State University. TNBC cells will be injected into the mammary fat pad of anesthetized BALB/cJ mice within a BSC. Mice will develop tumors over 2 weeks and will subsequently be injected with mAb-Exo-AAV and the luciferin ViviRen via tail vein injection. Mice will be harvested at various timepoints and tumor tissue harvested for multiple downstream

assays/manipulations, including flow cytometry in the UK FCIM core facility and Western blotting. The second project in Dr. Yang's laboratory works to evaluate calpain-5/CAPN5 as a therapeutic target. Genetically modified Ishikawa cells were previously generated that overexpress WT CAPN5 or mutant and inactivated CAPN5 via CRISPR technology and will be used in multiple different downstream assays. This project also involves a mouse xenograft model where Ishikawa and KLE cells will be subcutaneously injected into anesthetized mice within a BSC in DLAR using ABSL2 procedures. Mice will be housed at ABSL1 housing. This project also involves Stable Isotope-Resolved Metabolomics experiments and use of the Redox Metabolism Shared Resource facility in Combs. They will also utilize the X-Ray Irradiator operated by Dr. Tadahide Izumi to treat CAPN5 overexpressing cells with X-ray irradiation to determine the effect of CAPN5 status on cell survival. Lastly, Dr. Yang's third project describes the use of Spatially Fractionated Radiotherapy (SFRT), a treatment technique used in radiation therapy in which a grid-pattern or lattice-pattern is used with high and low doses (as opposed to uniform treatment). Cells will be irradiated, fixed with 4% paraformaldehyde, and stained for counting. All work with human source materials will be done using BSL2 containment and includes use of a BSC and lab coat, gloves, and eye protection. Dr. Yang's current IBC protocol will expire on July 5, 2026.

IBC Discussion & Vote:

The protocol renewal IBC-26-54 (version 8.0) was approved pending minor modification as listed below:

*

LOCATIONS: Research Locations Table – One of the locations in the table is listed as “Pending Assignment.” If this space has been assigned, please update the table with location information.

SCIENTIFIC SUMMARY – Please remove the word “sterile” in the statement: “We will use sterile lab coats, masks and gloves…” with “clean”.

*

Brandy Nelson initiated the motion. Maria Landron seconded the motion. All IBC members present (11) voted in favor of the motion.

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Conflicts of Interest: None

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PI: Mautin Barry-Hundeyin
IBC Protocol Number: IBC-26-55
Protocol Title: Study of immune tumor microenvironment in gastrointestinal cancers
Protocol Type: Renewal
Amendment To: N/A
Applicable Guidelines & Regulations: NIH Guidelines Section III-D-1, NIH Guidelines Section III-F-1, NIH Guidelines Section IV-B-7, OSHA Act of 1970 Clause 5(a)(1), OSHA 29 CFR 1910.1030, UK Administrative Regulation 6.3, UK Administrative Regulation 6.9
Maximum Containment Level: Biological Safety Level 2 - Enhanced (BSL2+), Animal Biological Safety

Level 1 (ABSL1)
Primary Reviewers: C. Haughton, Y. Wu, B. Nelson

Brief Project Overview:

Traditionally, gastrointestinal cancers have been treated by three ways- surgery, chemotherapy and radiation. In the last few decades, immunotherapy has emerged as an exciting new treatment modality. It involves using the body's immune system to fight cancer. Our laboratory seeks to understand how to leverage the power of the immune system to treat cancers of the pancreas, stomach and liver. In summary, we will study the role of macrophages in these cancers.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Animal work (breeding, surgeries, etc.), Bacterial culture, Cell culture, DNA/RNA isolation/purification, Flow cytometry/Cell sorting, Genetics, Histology, Imaging/Microscopy, Immunohistochemistry, PCR/qRT-PCR, Proteomics, Transfection, Transformation, Use of Human Source Material(s), Use of infectious agents, Use of viral vectors
Transport: Yes
Materials Transported: Biohazardous Materials, Animals
Infectious Agent(s)/Natural Host(s): Human Sourced Materials (RG2-cells, tissues, bodily fluids, organs, etc.)/ Human
Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: CXCL8/Human/Regulatory gene/Expression or Knockdown/Cell Culture/Lentiviral Vector/; ICOSL/Mouse/Regulatory gene/Expression/Cell Culture/pcDNA3.1 expression plasmid vector/; ICOSL/Mouse/Regulatory gene/Knockdown/Cell Culture/Lentiviral Vector/; OPN(SPP1)/Mouse/Phosphoprotein/Knockout/Mouse tumor cell line/OPN Double Nickase Plasmid (m)/; Luciferase/Firefly luciferase/Tracking/Expression/Tumor cell lines/pCAG-luciferase/; Cas9n (D10A)/S. pyogenes/cleavage enzyme/expression to KO Spp1 (mouse)/mouse tumor cells/OPN Double Nickase Plasmid (m)/; GFP/Jellyfish/Tracking/Expression/Mouse tumor cell line/OPN Double Nickase Plasmid (m)/
Vector(s) [Vector Category/Vector Technical Name]: Plasmid/pcDNA3.1/; Lentivirus/pLV[Exp]-EGFP:T2A:Puro-EF1A/; Lentivirus/pLV[shRNA]-EGFP:T2A:Puro-U6/; Plasmid/pmCherry-C1/; Plasmid/pEGFP-C1/; Plasmid/pCAG-luciferase/; Plasmid/OPN Double Nickase Plasmid (m)/; Plasmid/Control Double Nickase Plasmid
Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: Animal/YTN Mouse Gastric Cancer Cell Lines /; Animal/KPC Pancreatic cancer cell lines [FC1242 PDA Cells]/; Animal/RAW 247 Macrophages /; Animal/Panc01 Pancreatic cancer cell lines/; Animal/MC38 Colon cancer cell lines/; Animal/CT26 Colon cancer lines/; Human/THP-1 Human Monocytes/; Human/TCP-1008 Stomach (Gastric) Cancer Panel/; Human/HEK 293T/
Animal Use: Yes
Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Mouse/Cells - Animal, genetically modified/Subcutaneously or intraperitoneally/Anesthesia /ABSL2/Gown, eye protection, and gloves/ABSL1/No/Cells will be washed

three times before implanting to the mice mice will be housed at ABSL2 containment for a minimum of 72 hours post administration, after which they are moved to ABSL1 containment./; Mouse/Cells - Animal, non-modified/Subcutaneously, intraperitoneally, tail vein, or spleen injection/Anesthesia /ABSL1/Gown, eye protection, and gloves/ABSL1/No/IL-8/CXCL8 expression will be upregulated using lentiviral overexpression techniques in YTN mouse derived gastric cancer cell lines OR MC38/CT26 colon mice will be housed at ABSL2 containment for a minimum of 72 hours post administration, after which they are moved to ABSL1 containment. cancer cell lines. These will be injected into the spleen of mice aged 6-8 weeks to generate liver metastasis into C57BL/6 mice as described in the survival surgery section.

Risk Assessment/Discussion:

Dr. Barry-Hundeyin has submitted a renewal of her IBC protocol entitled Study of immune tumor microenvironment in gastrointestinal cancers. Her laboratory works to leverage the power of the immune system to treat cancers of the pancreas, stomach, and liver. Specifically, they study the role of macrophages in these cancers. Towards that aim, unfixed mouse and human pancreatic tumors are prepared for flow cytometry in the UK FCIM core facility. Human PBMCs are also obtained from patients for flow cytometry. Human pancreatic tumor tissue will also be used to generate human tumor organoids for histology, immunohistochemistry, and microscopy. Work with human source materials will be conducted using BSL2 containment, including use of lab coat, disposable gloves, and eye protection. 3rd generation lentivirus obtained from Vector Builder will be used to knockdown expression of CXCL8 and ICOSL and overexpress CXCL8 in cell culture. Lentivirus-transduced mouse cell lines will be injected into mice after washing no less than 3 times. These animals are injected with tumor cells into the pancreas via laparotomy while under anesthesia and housed at ABSL2 containment for 72 hours, after which they are moved to ABSL1 containment. All work with lentivirus and lentivirus-transduced cells will be done using BSL2+ containment, including exclusive work in the BSC and dedicated lab coat, gloves, and eye protection. Dr. Barry-Hundeyin's current IBC protocol will expire on June 16, 2026.

IBC Discussion & Vote:

The protocol renewal IBC-26-55 (version 8.0) was approved pending minor modifications as listed below:

*

PERSONNEL: M. Carey is listed as an undergraduate student working with biohazardous materials in the SciSure laboratory profile, but is not listed here. If M. Carey is an active lab member, please add them to the IBC personnel list.

RECOMBINANT AND/OR SYNTHETIC NUCLEIC ACID MATERIALS – Vector Information Table: The Scientific Summary states that a CRISPR/Cas9 plasmid will be used as a control for OPN(SPP1) CRISPR/Cas9 knockout but there is no information about this plasmid in the Vector Information table. Please update the Vector Information table to include an entry for this plasmid.

LOCATIONS – Research Locations Table: The IACUC indicates the HKRB 552B will be where animals are brought for euthanasia and tissue / tumor harvest, not just processing before implantation. Please update the Procedures column for HKRB 552B to include these details.

LOCATIONS – Biological Safety Equipment:

1. Under the "Use of hazardous or volatile chemicals," if 4% paraformaldehyde and/or formalin are used, please add them here.
2. Are the chemical volumes listed lab stock volume, or actual working volume utilized in the BSC? Volumes should be minimized to the amount needed for the procedure and number of samples being processed.

SCIENTIFIC SUMMARY -

1. The reference link under "Methods" is broken. Please update.
2. Please expand on the human PBMCs obtained from patients. By whom and where are these samples obtained from?
3. Please note the time frame between transduction of cells and the 3x washing of cells prior to administration into animals.
4. It is unclear if flow cytometry is done with fresh or fixed cells, and whether they are sorted for analysis. Please clarify.

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Yadi Wu initiated the motion. Brandy Nelson seconded the motion. All IBC members present (11) voted in favor of the motion.

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Conflicts of Interest: None

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New Business

- D. Mazzetti requested that the August IBC meeting be postponed one (1) week – to August 12, 2026- to accommodate UK Research Safety staff travel to biosafety symposium. No objections noted.
- Starting next month at the July IBC Meeting, meetings will be held via Teams instead of Zoom.

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Renewals

PI: Douglas Harrison
IBC Protocol Number: IBC-26-49
Protocol Title: B23-4205-M: Roles of JAK Signaling in Drosophila Development
Protocol Type: Renewal
Amendment To: N/A
Applicable Guidelines & Regulations: NIH Guidelines Section IV-B-7, UK Administrative Regulation 6.3, UK Administrative Regulation 6.9, OSHA Act of 1970 Clause 5(a)(1)
Maximum Containment Level: Biological Safety Level 1 (BSL1)
Primary Reviewers: D. Malherbe, A. Hunt, T. Chambers

Brief Project Overview:

A small number of defined signaling pathways have emerged as reutilized intracellular signaling cascades that initiate cellular responses. One of these is the Janus kinase (JAK) signaling pathway. JAK signaling is the primary component of the response of many vertebrate cells to many cytokines and growth factors. Consequently, the JAK pathway is essential for a many developmental events, including hematopoiesis, immune system development, and general growth. The pathway has been evolutionarily conserved from insects to human. As in vertebrates, the pathway is critical to many developmental events, some of which require graded JAK activity to pattern tissues during development. The fly JAK pathway is stimulated by a small family of related ligands, Unpaired (Upd), Upd2, and Upd3. The primary goal of current lab research is to understand the relationship of these signaling molecules to each other and to the developmental functions of the pathway. Specific projects related to this goal include: 1) Determination of the developmental roles of Upd3 in gametogenesis, 2) Investigation of JAK/STAT signaling in spermiogenesis.

Summary of Biohazard Materials & Manipulations:

Manipulations Planned: Genetics, Histology, Imaging/Microscopy, Animal work (breeding, surgeries, etc.)
Transport: No
Materials Transported: N/A
Infectious Agent(s)/Natural Host(s): N/A
Source & Nature of Inserted Nucleic Acid(s) [Gene Information/Gene Source/Gene Category/Use of Construct/Host(s)/Vector(s)]: green fluorescent protein and variants/Aquoria victoria/tracking gene/expression/bacteria, Drosophila/pUAST/; Upd1, Upd2, Upd3/Drosophila/membrane proteins, signaling ligands/expression/bacteria, Drosophila/pUAST/; Domeless/Drosophila/membrane protein, signaling receptor/expression/bacteria, Drosophila/pUAST/; Cherry fluorescent protein and variants/D discoidium/tracking gene/expression/bacteria, Drosophila/pUAST/
Vector(s) [Vector Category/Vector Technical Name]: Plasmid/pCaSpeR4/; Plasmid/pUAST/; Plasmid/pUAST-attB/; Plasmid/pUAS-DEST-C-GFP
Cell line(s) Used [Cell Line Type/Cell Line Technical Name]: N/A
Animal Use: Yes
Materials introduced into Animals [Animal Host Species/Biohazardous Material/Route of Administration/Restraint/Animal Experimental Procedures/PPE/Animal Housing/Agent Shedding/Special Practices & Procedures]: Fruit Fly/Plasmid/microinjection/unrestrained immobile embryos/ABSL1/gloves, lab coat/ABSL1/No//

Risk Assessment/Discussion:

Dr. Harrison has submitted a renewal of his IBC protocol entitled Roles of JAK Signaling in Drosophila Development. Dr. Harrison's laboratory seeks to better understand the Janus kinase (JAK) signaling pathway, an evolutionarily conserved pathway from insects to humans. Dr. Harrison's laboratory has two specific projects related to this goal. The first project aims to determine the developmental roles of Upd3 in gametogenesis. Transgenic Drosophila with altered activity of Upd3 or other JAK/STAT components will be generated. Cells will be examined in live and fixed tissues. The second project will investigate the role

of JAK/STAT signaling in spermiogenesis. RNA-Seq in JAK/STAT impaired testes will be compared to the expression profile in WT testes and identified target genes will be tested for roles in spermiogenesis using Drosophila RNAi lines. Transgenic Drosophila will be generated by microinjection of Drosophila embryos, and transgenic animals are identified by stable introduction of the eye color marker, the white gene, present in each vector. For all manipulations, adult flies will be anesthetized using CO2. Downstream assays of tissues include immunofluorescence, Western blotting, and RNA quantification methods. All work described in Dr. Harrison's IBC protocol will be done using BSL1 containment, and includes the use of lab coats, disposable gloves, and eye protection. Furthermore, all work with open Drosophila cultures is restricted to a single room with attractant traps that are regularly refreshed. Dr. Harrison's current IBC protocol will expire on June 15, 2026.

Doug Harrison left the meeting at 12:49pm during discussion of his IBC protocol

IBC Discussion & Vote:

The protocol renewal IBC-26-49 (version 8.0) was approved.

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Tom Chambers initiated the motion. Arthur Hunt seconded the motion. All IBC members present (10) voted in favor of the motion.

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Conflicts of Interest: None

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Incident Review

None.

Protocol Issued Registration Numbers

Protocols issued registration numbers, including minor amendments. These protocols are exempt from IBC review and are registered with the UK Biological Safety Officer (BSO).

Campbell, Kenneth, Cellular level contractile function in human heart failure, Amendment, BSO, IBC-24-482 (v.68.0), 6/3/2026

Brainson, Christine, Defining epigenetic vulnerabilities of lung cancer and lung disease, Amendment, BSO, IBC-25-85 (v.38.0), 6/2/2026

Bieberich, Erhard, Function of sphingolipid and associated factors in physiology and disease, Amendment, BSO, IBC-24-346 (v.27.0), 5/28/2026

Lee, Daniel, Modulation of Arginine Metabolism and Polyamines to Mitigate Alzheimer's Disease Pathology, Amendment, BSO, IBC-24-60 (v.29.0), 5/28/2026

Wong, Lesley, Breast Capsule Biobank, Renewal, BSO, IBC-26-39 (v.12.0), 5/27/2026

Selenica, Maj-Linda, Cellular and animal models of proteinopathies associated with neurodegeneration, Amendment, BSO, IBC-24-137 (v.29.0), 5/27/2026

Tian, Changhai, Intra- and Inter-organ communications by extracellular vesicles in the pathogenesis of cardiovascular and neurodegenertive disorders, Amendment, BSO, IBC-24-402 (v.40.0), 5/27/2026

Troedsson, Mats, Development of a protein-based diagnostic in vivo test for endometrial biofilms, Amendment, BSO, IBC-25-04 (v.33.0), 5/27/2026

Tackenberg, Michael C., Genetic, molecular, and environmental determinants of circadian period length and output phase., Amendment, BSO, IBC-25-130 (v.32.0), 5/27/2026

DeRouchey, Jason, Linking Structure, Stability and Protection in Protamine Packaged DNA, Amendment, BSO, IBC-24-58 (v.15.0), 5/26/2026

Rellinger, Eric, Studies on Neuroblastoma Tumor Formation and Metastasis, Amendment, BSO, IBC-24-455 (v.31.0), 5/26/2026

Ubil, Eric, PTP1b Inhibition Restores the Innate Anti-tumor Response During Chemotherapy, Amendment, BSO, IBC-24-446 (v.20.0), 5/26/2026

Elsayed, Hossam, Multiomics Analysis of Human Myometrial Cells in Response to LPS Stimulation, Amendment, BSO, IBC-25-117 (v.16.0), 5/26/2026

Shridas, Preetha, Inflammation, lipoproteins and chronic disease., Amendment, BSO, IBC-25-59 (v.22.0), 5/21/2026

Gipson-Reichardt, Cassandra, Glutamate, Neuroinflammation, Acetylcholine, HIV and Addiction, Amendment, BSO, IBC-25-181 (v.27.0), 5/21/2026

Famulski, Jakub, Epithelial sheet fusion and periocular mesenchyme migration during zebrafish retinal morphogenesis., Amendment, BSO, IBC-24-99 (v.39.0), 5/21/2026

McLaurin, Kristen, Impacts of Comorbid Oxycodone and Aging on Neurocognition in the HIV-1 Transgenic Rat, Amendment, BSO, IBC-24-400 (v.24.0), 5/21/2026

McLaurin, Kristen, Compound and Infectious Disease Detection in Syringe Equipment of Injection Drug Users, Amendment, BSO, IBC-24-116 (v.33.0), 5/21/2026

Liu, Xia, The mechanism of cancer metastasis, Amendment, BSO, IBC-25-144 (v.19.0), 5/20/2026

Czuba, Lindsay, Mechanisms of Small of Molecule Transport and Metabolism, Amendment, BSO, IBC-25-102 (v.20.0), 5/18/2026

Stevenson, Brian, Borrelia burgdorferi (sensu lato) and Borrelia miyamotoi, Amendment, BSO, IBC-24-429 (v.20.0), 5/12/2026

Xiao, Guan-Yu, A pro-metastatic secretory program activated by epithelial-to-mesenchymal transition, Amendment, BSO, IBC-24-140 (v.33.0), 5/11/2026

Rangnekar, Vivek, Apoptosis by Par-4, Amendment, BSO, IBC-24-396 (v.46.0), 5/8/2026

Pinto, Amelia, Risk group two virus protocol, Amendment, BSO, IBC-24-83 (v.70.0), 5/7/2026

McLaurin, Kristen, Neurocognitive Impairments Resulting from Adolescent Prescription Opioid Use Disorder, Amendment, BSO, IBC-24-37 (v.36.0), 5/6/2026

Protocols Meeting Registration Requirements

Protocols that have been approved by the IBC pending minor modifications that have met approval requirements.

Hao, Zhonglin, 23-LUN-133-LB (LB2102-1001): A First in Human Dose Escalation and Cohort Expansion Study of DLL3-directed Chimeric Antigen Receptor T-cells in Subjects with Extensive Stage Small Cell Lung Cancer., Renewal, IBC, IBC-26-43 (v.10.0), 5/26/2026

Hao, Zhonglin, LUN-150-CDJI136A12101L: A Phase I/II open label study of DJI136, a DLL3-targeted CAR-T therapy, in adult patients with ES-SCLC, New, IBC, IBC-26-36 (v.7.0), 5/26/2026

Wolf, Katerina, Pathogenesis of C. trachomatis and C. pneumoniae via chlamydial mutagenesis, Renewal, IBC, IBC-26-44 (v.13.0), 5/21/2026

Zhou, Binhua, Identification of the molecular determinants governing breast cancer development and metastasis, Amendment, IBC, IBC-24-459 (v.27.0), 5/19/2026

D'Orazio, Sarah, Host-pathogen Interactions during Listeria monocytogenes infection, Renewal, IBC, IBC-26-48 (v.11.0), 5/14/2026

Wu, Yadi, Characterize the role of EBF1 and Hivep2 in breast cancer progression, Amendment, IBC, IBC-25-88 (v.24.0), 5/14/2026

Kirby, Tyler, Nuclear dynamics in skeletal muscle cells, New, IBC, IBC-26-18 (v.17.0), 5/13/2026

Long, Alexandra, Mechanisms Underlying Cellular Remodeling Using Chytrid Fungi as an Evolutionary Cell Biology Model System, Amendment, IBC, IBC-25-07 (v.28.0), 5/13/2026

Palli, Reddy, Insect Physiology, Biochemistry and Molecular Biology, Renewal, IBC, IBC-26-34 (v.9.0), 5/7/2026

IBC Training

None. All current IBC members have completed training online via SciShield.

Adjournment

Tom Chambers moved to adjourn the meeting at 12:51PM. Arthur Hunt seconded the motion. All members present (10) voted in favor.